

U.S. Department of the Interior
Bureau of Land Management
Little Snake Field Office
455 Emerson Street
Craig, CO 81625-1129

ENVIRONMENTAL ASSESSMENT

EA-NUMBER: DOI-BLM-CO-N010-2009-0078-EA

CASEFILE/PROJECT NUMBER/LEASE NUMBER: COC02913

PROJECT NAME: Sparks Ridge Unit Well #9-33

LEGAL DESCRIPTION: NWSE Section 33, T12N, R101W, 6th P.M.

APPLICANT: Questar Exploration & Production Company

PLAN CONFORMANCE REVIEW: The proposed action is subject to the following plan:

Name of Plans: Little Snake Resource Management Plan and Record of Decision (ROD) approved on April 26, 1989; and the Colorado Oil and Gas Leasing & Development Environmental Impact Statement (EIS) and the ROD signed on November 5, 1991.

Remarks: The proposed Sparks Ridge Unit Well #9-33 would be located within Management Unit 2 (Little Snake Resource Management Plan). One of the objectives of Management Unit 2 is to provide for the development of the oil and gas resource. The development of other resource uses/values within this unit is allowed consistent with the management objectives for oil, gas, and forest resources.

The proposed action was reviewed for conformance with this plan (43 CFR 1610.5, BLM 1617.3). The proposed action is in conformance with the objectives for this management unit.

NEED FOR PROPOSED ACTION: To provide for the development of oil and gas resources and to supply energy resources to the American public.

PUBLIC SCOPING PROCESS: The Notice of Staking (NOS) has been posted in the public room of the Little Snake Field Office for a 30-day public review period beginning June 18, 2009 when the NOS was received, and may be viewed during regular business hours (7:45 a.m. to 4:30 p.m.), Monday through Friday, except holidays.

DESCRIPTION OF PROPOSED ACTION AND ALTERNATIVES: The proposed action would be to approve one Application for Permit to Drill (APD) submitted by Questar Exploration & Production Company. Questar Exploration & Production Company proposes to drill one gas well on BLM administered land located in the NWSE Sec. 33, T12N, R101W, 6th P.M. An APD has been filed with the LSFO for the Sparks Ridge Unit Well #9-33. The APD includes drilling and surface use plans that cover mitigation of impacts to vegetation, soil, surface water, and other resources. Mitigation not incorporated by Questar Exploration & Production Company in the drilling and surface use plan would be attached by the BLM as Conditions of Approval to an approved APD.

The proposed well would be located approximately 60 miles north west from the town of Maybell, CO and approximately 7 miles west of Hiawatha, CO. Construction work is planned to start during the fall of 2009 and the estimated duration of construction and drilling for the well would be 55 days. A short access road would be constructed for the well. Approximately 1534.1 feet of new access road would be constructed resulting in new surface disturbance of 1.8 acres. All road construction would be on lease and on BLM surface and would not require a federal Right-of-Way.

The proposed well pad would be cleared of all vegetation and leveled for drilling. Topsoil and native vegetation would be stockpiled for use in reclamation. Approximately 6.5 acres would be disturbed for construction of the well pad. This would include the 400' by 400' well pad, the topsoil, and subsoil piles. A reserve pit would be constructed on the well pad to hold drill mud and cuttings. If the well is a producer, cut portions of the well site would be backfilled and unused portions of the well site would be stabilized and re-vegetated. If the gas well proves unproductive, it would be properly plugged and the entire well pad and access road would be reclaimed.

Questar Exploration & Production Company did not include plans for a gas sales pipeline with the APD.

Total surface disturbance for the proposed action would be 8.3 acres.

NO ACTION ALTERNATIVE: The “no action” alternative is that the well would not be permitted and therefore the well would not be drilled. Questar Exploration & Production Company holds a valid and current oil and gas lease for the area where the proposed Sparks Ridge Unit Well #9-33 would be located. Under leasing contracts, the BLM has an obligation to allow mineral development if the environmental consequences are not irreversible or too severe. The APD process is designed to overcome the no action situation of not accepting the APD through the mitigation of predicted environmental consequences. Since the proposed action is consistent with the ROD and the Oil and Gas Leasing EIS, the no action alternative will not be analyzed further in this EA.

AFFECTED ENVIRONMENT/ENVIRONMENTAL CONSEQUENCES/MITIGATION MEASURES

CRITICAL RESOURCES

AIR QUALITY

Affected Environment: There are no special designation air sheds or non-attainment areas nearby that would be affected by the proposed action.

Environmental Consequences: Short term, local impacts to air quality from dust would result during and after well pad construction. Drilling operations produce air emissions such as exhaust from diesel engines that power drilling equipment. Air pollutants could include nitrogen oxides, particulates, ozone, volatile organic compounds, fugitive natural gas, and carbon monoxide. Gas flaring reduces the health and safety risks in the vicinity of the well by burning combustible and poisonous gases like methane and hydrogen sulfide.

Mitigative Measures: None.

Name of specialist and date: Shawn Wiser 07/20/09

AREA OF CRITICAL ENVIRONMENTAL CONCERN

Affected Environment: Not Present.

Environmental Consequences: Not Applicable.

Mitigative Measures: Not Applicable.

Name of specialist and date: Kimberly Miller 07/22/09

CULTURAL RESOURCES

Affected Environment: Cultural resources, in this region of Colorado, range from late Paleo-Indian to Historic. For a general understanding of the cultural resources in this area of Colorado, see *An Overview of Prehistoric Cultural Resources, Little Snake Resource Area, Northwestern Colorado*, Bureau of Land Management Colorado, Cultural Resources Series, Number 20, *An Isolated Empire, A History of Northwestern Colorado*, Bureau of Land Management Colorado, Cultural Resource Series, Number 2 and *Colorado Prehistory: A Context for the Northern Colorado River Basin*, Colorado Council of Professional Archaeologists.

Environmental Consequences: The proposed project, Sparks Ridge 9-33 Well Pad and Access Road, has undergone a Class III cultural resource survey:

Darlington, David

2009 Class III Cultural Resource Inventory for the Questar Exploration and Production Company Sparks Ridge Unit 9-33 Well Pad and Access Road (BLM 12.37.09)

The survey identified no eligible to the National Register of Historic Places cultural resources. The proposed project may proceed as described with the following mitigative measures in place.

Mitigative Measures:

The following standard stipulations apply for this project:

1. The operator is responsible for informing all persons who are associated with the operations that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are encountered or uncovered during any project activities, the operator is to immediately stop activities in the immediate vicinity of the find and immediately contact the authorized officer (AO) at (970) 826-5000. Within five working days, the AO will inform the operator as to:

- Whether the materials appear eligible for the National Register of Historic Places;
- The mitigation measures the operator will likely have to undertake before the identified area can be used for project activities again; and
- Pursuant to 43 CFR 10.4(g) (Federal Register Notice, Monday, December 4, 1995, Vol. 60, No. 232) the holder of this authorization must notify the AO, by telephone at (970) 826-5000, and with written confirmation, immediately upon the discovery of human remains, funerary items, sacred objects, or objects of cultural patrimony. Further, pursuant to 43 CFR 10.4(c) and (d), you must stop activities in the vicinity of the discovery and protect it for 30 days or until notified to proceed by the authorized officer.

2. If the operator wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the operator will be responsible for mitigation costs. The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that the required mitigation has been completed, the operator will then be allowed to resume construction.

Name of specialist and date: Robyn Watkins Morris 08/17/09

ENVIRONMENTAL JUSTICE

Affected Environment: The proposed action would be located in an area of isolated dwellings. Oil and gas development and ranching are the primary economic activities.

Environmental Consequences: The project area would be relatively isolated from population centers, so no populations would be affected by physical or socioeconomic impacts of either alternative. The proposed action would not directly affect the social, cultural or economic well-being and health of Native American, minority or low-income populations.

Mitigative Measures: None.

Name of specialist and date: Louise McMinn 07/23/09

FLOOD PLAINS

Affected Environment: Active floodplains and flood prone zones would be avoided.

Environmental Consequences: No threat to human safety, life, welfare, or property would result from the proposed action.

Mitigative Measures: None.

Name of specialist and date: Shawn Wiser 07/20/09

INVASIVE, NONNATIVE SPECIES

Affected Environment: Invasive species and noxious weeds occur within the affected area. Downy brome (cheatgrass), yellow alyssum, blue mustard and other annual weeds are common along roadsides and on other disturbed areas. Canada thistle and several species of biennial thistles are known to occur in this area. Halogeton has become a very noticeable problem in the affected area, as well as other areas in the western portion of Moffat County. Russian knapweed and hoary cress (whitetop) have been found in the vicinity of these projects. Other species of noxious weeds are not known to be a problem in this area, but they can always be introduced by vehicle traffic, livestock and wildlife. The BLM, Moffat County, livestock operators, pipeline companies and oil and gas operators have formed the Northwest Colorado Weed Partnership to collaborate their efforts on controlling weeds and finding the best integrated approaches to achieve these results.

Environmental Consequences: The surface disturbing activities and associated traffic involved with drilling these wells, constructing access roads, installing pipelines and subsequent activities would create an environment and provide a mode of transport for invasive species and other noxious weeds to become established. Construction equipment and any other vehicles and equipment brought onto the site can introduce weed species. Wind, water, recreation vehicles, livestock and wildlife would also assist with the distribution of weed seed into the newly disturbed areas. The annual invasive weed species (yellow alyssum, blue mustard and other annual weeds) occur on adjacent rangelands and would occupy the disturbed areas; the bare soils and the lack of competition from a perennial plant community would allow these weed species to grow unchecked and can

affect the establishment of seeded plant species. Halogeton is a noxious annual weed that would also occupy the disturbed areas, but this weed species would likely require intensive control with herbicides to prevent it from moving into adjacent rangelands. Establishment of perennial grasses and other seeded plants is expected to provide the necessary control of invasive annual weeds within 2 or 3 years. Additional seeding treatments of the disturbed areas may be required in subsequent years if initial seeding efforts have failed.

The perennial and biennial noxious weeds in the area are less frequently established on the uplands but some potential exists for their establishment in draws and swales or areas along the road that would collect additional water. The largest concern in the project area would be for these species to become established and not be detected, providing seed which can be moved onto adjacent rangelands. The operator would be required to control any invasive and/or noxious weeds that become established within the disturbed areas involved with drilling and operating the well.

Mitigation attached as Conditions of Approval to minimize disturbance and obtain successful reclamation of the disturbed areas, as well as weed control utilizing integrated practices, including herbicide applications would help to control the noxious weed species. All principles of Integrated Pest Management should be employed to control noxious and invasive weeds on public lands.

Mitigative Measures: None.

Name of specialist and date: Shawn Wiser 07/20/09

MIGRATORY BIRDS

Affected Environment: BLM Instruction Memorandum No. 2008-050 provides guidance towards meeting BLM's responsibilities under the Migratory Bird Treaty Act (MBTA) and the Executive Order (EO) 13186. The guidance emphasizes management of habitat for species of conservation concern by avoiding or minimizing negative impacts and restoring and enhancing habitat quality. The LSFO provides both foraging and nesting habitat for a variety of migratory bird species. Several species on the USFWS's List of Conservation Concern occupy these habitats within the LSFO.

Specific to the project area, native plant communities are comprised of sagebrush and saltbrush with a healthy component of native grasses and forbs. Two sagebrush obligate species listed on USFWS's Bird of Conservation Concern List, the sage sparrow and the Brewer's sparrow may nest in the general Hiawatha area. Other species that are not on the BCC list but associated primarily with this habitat type include vesper sparrow and sage thrasher. There are no active raptor nests in the vicinity of the proposed action.

Environmental Consequences: The Proposed Action would remove approximately 8.3 acres of migratory bird habitat throughout the project area. Although this disturbance would be minimal on a landscape level, it would decrease patch size and may degrade

habitat on a small scale. Indirectly, habitat effectiveness adjacent to well pads would be reduced as a result of noise and human activity during construction, drilling and completion activities. The proposed action would be scheduled for drilling later this fall and should not impact migratory birds during the nesting period. However, if drilling activities do occur during the nesting season, there could be negative impacts to migratory bird species through nest destruction or increased stress leading to nest abandonment.

Mitigative Measures: None.

Name of Specialist and Date: Desa Ausmus 07/27/09

NATIVE AMERICAN RELIGIOUS CONCERNS

A letter was sent to the Eastern Shoshone, Uinta and Ouray Tribal Council, Southern Ute Tribal Council, Ute Mountain Ute Tribal Council on May 26, 2009. The letter listed the FY2010 projects that the BLM would notify them on and projects that would not require notification. A follow-up phone call was performed on July 26, 2009. No comments were received (Letter on file at the Little Snake Field Office). This project requires no additional notification.

Name of specialist and date: Robyn Watkins Morris 08/17/09

PRIME & UNIQUE FARMLANDS

Affected Environment: Not Present.

Environmental Consequences: None.

Mitigative Measures: None.

Name of specialist and date: Shawn Wiser 07/20/09

T&E AND SENSITIVE ANIMALS

Affected Environment: There are no threatened or endangered wildlife species or habitat for such species in or near the proposed well site. The Hiawatha area provides overall habitat for greater sage grouse, a BLM sensitive species. The proposed well site does not provide nesting or critical winter habitat for greater sage grouse. The only lek within a two mile radius of the well site has been inactive since 2002.

Environmental Consequences: The location of the Proposed Action provides limited habitat for grouse during non-critical times of the year or when moving to and from winter or nesting habitat. Impacts to grouse species from oil and gas development are discussed in the Colorado Oil and Gas EIS (1991). Impacts include, but are not limited to, direct loss of habitat, displacement due to disturbances, noise and an increase in human activity and

habitat fragmentation. Approximately 8.3 acres of sage grouse habitat would be altered with the proposed action. The disturbance of 8.3 acres would have minimal impacts to sage grouse habitat on a landscape level, however, sustained development and the proliferation of roads, well pads, pipelines, compressor stations and other surface facilities would continue to reduce habitat patch size and affect both habitat quality and quantity. It is likely that sage grouse use of the area would decrease as disturbances and habitat fragmentation continue.

Mitigative Measures: None.

Name of Specialist and Date: Desa Ausmus 07/27/09

T&E AND SENSITIVE PLANTS

Affected Environment: There are no federally listed threatened or endangered or BLM sensitive plant species present in the vicinity of the proposed well.

Environmental Consequences: None.

Mitigative Measures: None.

Name of specialist and date: Hunter Seim 07/21/09

WASTES, HAZARDOUS OR SOLID

Affected Environment: If a release does occur, the environment affected would be dependent on the nature and volume of material released. If there are no releases, there would be no impact on the environment.

Environmental Consequences: Consequences would be dependent on the volume and nature of the material released. In most every situation involving hazardous materials, there are ways to remediate the area that has been contaminated. Short-term consequences would occur, but they can be remedied, and long-term impacts would be minimal.

Mitigative Measures: None.

Name of specialist and date: Shawn Wiser 07/20/09

WATER QUALITY – GROUND

Affected Environment: The well would be in an area where the geology has the potential for ground water aquifers in the Fort Union Formation. The ground water quality in the area ranges from useable to poor.

Environmental Consequences: Due to the drilling and cementing program, there would be no adverse impacts to ground water quality. The proposed action would be conducted in accordance with existing Colorado laws for water quality. Specifically, all permit activities must comply with the applicable water quality regulations in The Colorado Water Quality Control Act, and they would be in conformance with the classifications and numeric standards for water quality established by the Colorado Water Quality Control Commission.

Mitigative Measures: None.

Name of specialist and date: Jennifer Maiolo 08/03/09

WATER QUALITY – SURFACE

Affected Environment: The proposed well would be constructed near an ephemeral drainage. Any runoff from the well pad or access road would drain into G Wash. All stream segments near the well pad location are presently supporting classified beneficial uses. No impaired stream segments occur in the vicinity of the proposed action.

Environmental Consequences: Runoff water from the well site would drain towards G Wash, which is an ephemeral tributary to Canyon Creek. Increased sedimentation to Canyon Creek during spring runoff or from high intensity rainstorms is the most likely environmental consequence from the proposed action. Although some sediment may be transported off site and eventually reach perennial waters, the mitigation provided in the Surface Use Plan and the Conditions of Approval would reduce the potential impacts caused by surface runoff.

Mitigative Measures: None.

Name of specialist and date: Shawn Wiser 07/20/09

WETLANDS/RIPARIAN ZONES

Affected Environment: There are no wetlands or riparian areas located near the proposed well site.

Environmental Consequences: None.

Mitigative Measures: None.

Name of specialist and date: Desa Ausmus 08/13/09

WILD & SCENIC RIVERS

Affected Environment: Not Present.

Environmental Consequences: Not Applicable.

Mitigative Measures: Not Applicable.

Name of specialist and date: Kimberly Miller 07/22/09

WSAs, WILDERNESS CHARACTERISTICS

Affected Environment: Not Present.

Environmental Consequences: Not Applicable.

Mitigative Measures: Not Applicable.

Name of specialist and date: Kimberly Miller 07/22/09

NON-CRITICAL ELEMENTS

AQUATIC WILDLIFE

Affected Environment: No aquatic wildlife or habitat for aquatic wildlife exists within the Proposed Action area.

Environmental Consequences: None.

Mitigative Measures: None.

Name of Specialist and Date: Desa Ausmus 07/24/09

FLUID MINERALS

Affected Environment: Drilling through Wasatch, Mesaverde and Frontier Sandstone formation Rocks.

Environmental Consequences: Depletion of fluid minerals in the producing zones.

Mitigative measures: None.

Name of specialist and date: Jennifer Maiolo 08/03/09

REALTY AUTHORIZATIONS

Affected Environment: The proposed project area is in an area which contains a buried pipeline right-of-way and other realty authorizations.

Environmental Consequences: Existing buried pipelines or other facilities could be accidentally damaged during project activities. Impacts would be temporary until any damage is repaired.

Mitigative Measures: Potential damage to existing rights-of-way would be minimized by the following actions:

- Avoid existing rights-of-way during the project.
- Utilize the “One Call” system to locate and stake the centerline and limits of all underground facilities in the area prior to project initiation.
- Provide 48-hour notice to the owner/operator of all facilities prior to performing any work near existing rights-of-way.

Name of specialist and date: Louise McMinn 07/23/09

SOILS

Affected Environment: The proposed well would be located within the Diaflats-Fondillas complex soil-mapping unit. These deep soils are well drained and found on planar and convex slopes on dissected plateaus. Slopes within this unit average 2 to 15 percent. These soils are formed in residuum derived from fine grained sandstone and siltstone. Runoff is high to very high and the hazard of wind and water erosion is moderate to high.

Environmental Consequences: The construction and operation of the proposed project would affect soils within and immediately adjacent to the proposed area of disturbance. Increased soil erosion from wind and water would occur during construction of the well pad and access road. Erosion would continue throughout the operational life of the well. Loss of topsoil, soil compaction, and possible increases in sediment loads to drainages are impacts most likely to occur.

Vegetation and soil would be removed from approximately 8.3 acres of land. Soil productivity would decline due to reduced soil microbial activity, impaired water infiltration, mixing of soil horizons, top soil loss, and introduction of weeds. Soil loss from construction would be greatest shortly after project start and would decrease in time as a result of stabilization through revegetation and reclamation of disturbed areas. Soil erosion would be reduced to an acceptable level with the mitigation described in the Surface Use Plan and Conditions of Approval in the approved APD. This mitigation would reduce the potential to have excessive sediments and salts in runoff water from the well site.

Mitigative Measures: Additional mitigative measures would be employed to prevent or reduce accelerated erosion if it begins to occur within or on constructed drainage and diversion ditches or surface drainages affected by the road or well pad.

Name of specialist and date: Shawn Wiser 07/20/09

UPLAND VEGETATION

Affected Environment: The proposed Sparks Ridge well would be located in a Loamy Ecological site which typically supports Wyoming big sagebrush, saltbrush, needle and thread, Indian ricegrass, western wheatgrass, Nevada bluegrass, bottlebrush squirreltail and prairie Junegrass. Species noted during the on-site included those listed above, although the wheatgrasses were absent, and additionally, dryland sedge and the forbs scarlet globemallow and cushion phlox. This area is one of the few areas that is not experiencing an aggressive encroachment from the noxious weed *Halogeton glomeratus*, although present on this site the native vegetation exhibited good vigor and may be holding this weed encroachment in check.

Environmental Consequences: The proposed well would completely remove the vegetation from 8.3 acres on Federal surface. While this removal would be relatively minor in the larger landscape, it would be in addition to numerous other plant community intrusions such as other roads and wells in the area. Any disturbance to the native plant community could result in the increased presence of non-native plant species; therefore, weed management practices must be followed. As required, the site would be partially reclaimed if the well is a producer and completely reclaimed if the well does not produce. Aridity and weed competition may result in very slow re-establishment of the native species that are seeded during reclamation. Careful adherence to required reclamation practices would be vital to ensuring that the direct impacts of the Proposed Action do not have long-term adverse impacts to the plant community.

Mitigative Measures: Adherence to the reclamation and stabilization measures as described in the Surface Use Plan and COAs.

Name of specialist and date: Mark Lowrey 07/21/09

WILDLIFE, TERRESTRIAL

Affected Environment: Native plant communities in the Proposed Action area are comprised of sagebrush and saltbush with a healthy understory of grasses and forbs. These plant communities provide habitat for a variety of big game, small mammals, birds and reptiles. The proposed project area provides year round habitat for pronghorn antelope and mule deer in all but the most severe winters. There is no critical habitat for any wildlife species within the Proposed Action area.

Environmental Consequences: Impacts to wildlife species from oil and gas development are discussed in the Colorado Oil and Gas EIS (1991). Impacts include, but are not limited to, displacement into less suitable habitat, increased stress and loss of habitat. These impacts are more significant during critical seasons, such as winter or reproduction. Although the project area does not provide critical habitat for wildlife species, some impacts to wildlife would still be expected from this project. Impacts would mostly occur from habitat modification or displacement during construction activities.

Most small mammals, birds and reptiles using the project area would be capable of avoiding construction equipment and should not be directly harmed by these activities. Some burrowing animals may be killed by construction equipment. This should be considered a short-term negative impact that is not likely to harm populations of any species.

Mitigative Measures: None.

Name of Specialist and Date: Desa Ausmus 07/24/09

OTHER NON-CRITICAL ELEMENTS:

| Non-Critical Element | NA or Not Present | Applicable or Present, No Impact | Applicable & Present and Brought Forward for Analysis |
|-------------------------|-------------------|----------------------------------|---|
| Fluid Minerals | | | See Fluid Minerals |
| Forest Management | SW 07/20/09 | | |
| Hydrology/Ground | | | See Water Quality, Ground |
| Hydrology/Surface | | | See Hydrology/Surface |
| Paleontology | | JAM 07/24/09 | |
| Range Management | | MAL 07/21/09 | |
| Realty Authorizations | | | See Realty Authorizations |
| Recreation/Travel Mgmt | | KMM 07/22/09 | |
| Socio-Economics | | LM 07/23/09 | |
| Solid Minerals | | JAM 07/24/09 | |
| Visual Resources | | KMM 07/22/09 | |
| Wild Horse & Burro Mgmt | | SW 07/20/09 | |

CUMULATIVE IMPACTS SUMMARY: Cumulative impacts may result from the development of the Sparks Ridge Unit Well #9-33 when added to non-project impacts that result from past, present, and reasonably foreseeable future actions. The potential exists for future oil and gas development throughout the Sparks Ridge Unit. Currently other producing wells exist within a one-mile radius of the proposed well. Other past or existing actions near the project area that have influence on the landscape are wildfire, recreation, hunting, grazing, and ranching activities.

Surface disturbance associated with oil and gas activity would increase the potential for erosion and sedimentation. Displacement of hunters and recreationists during the short-term construction and drilling periods would occur. Contrasts in line, form, color, and texture from development would impact the visual qualities on the landscape.

Cumulative impacts to the plant communities within the gas lease and adjacent areas include an incremental reduction of continuity in the plant communities in terms of acreages that remain undisturbed. Loss of continuity results in smaller and smaller areas of undisturbed native vegetation and the potential for loss of integrity within the larger plant community. Fragmented plant communities can lose resilience to natural and man-made disturbance due to isolation of areas from seed sources necessary for proper age class distribution of plants, and subsequently, a greater opportunity for stressors such as drought to have a more severe impact on the plant community as a whole. The increased disturbance also makes native plant communities more susceptible to invasion by annual weeds as vectors for increasing weeds. Even with weed control measures applied, the potential for weeds to move further into undisturbed remnant areas increases as these remnants become smaller and more isolated from larger undisturbed areas.

Cumulative impacts to the livestock grazing operations in the area are also increased through the proposed action. The grazing allotment in which this well is proposed is primarily a winter sheep allotment. The growth in wells, roads, and human activity has reduced the availability of forage in this area far beyond direct impacts caused by construction. Halogeton which has increased among the new roads and well pads is toxic to sheep. The resulting impact to grazing activities permitted in the area is a loss of available Animal Unit Months (AUMs), i.e. a loss of the amount of livestock that the allotment can reasonably carry.

Habitat fragmentation from well pad construction and the associated roads have likely decreased the nesting suitability for migratory birds in the Sparks Ridge Unit area. Ingelfinger (2001) found that roads associated with oil and gas development have a negative impact on passerines bird species. Bird densities were reduced within 100m of each road. Due to the amount of new road construction and an increase in traffic on these roads, passerine populations in the area are likely decreasing.

The cumulative impacts of additional wells and roads in the Sparks Ridge Unit would continue to degrade habitat for the greater sage grouse. Fragmentation, mostly due to road construction, is an important factor contributing to a decrease in habitat quality. Disturbances such as higher traffic volume and other human activities also contribute to degradation of habitat quality. However, as the area is not used for nesting, brood rearing, or wintering, these impacts would be less severe. Continued oil and gas development would lead to decreased sage grouse use of the habitat.

Although big game species are able to adapt to disturbances better than other wildlife, increased development would still have impacts to mule deer and antelope. Timing stipulations adequately protect big game species during critical times of the year; however, continued oil and gas development would lead to decreased use of the habitat due to increased human activity. A significant amount of vehicle traffic occurs with oil and gas development. Impacts to big game may be vehicle-animal collisions, as these are a major cause of mortality for big game species.

References:

Ingelfinger, F. 2001. The Effects of Natural Gas Development on Sagebrush Steppe Passerines in Sublette County, Wyoming. University of Wyoming, Laramie, WY.

STANDARDS:

SPECIAL STATUS, THREATENED AND ENDANGERED SPECIES (animal)

STANDARD: The project area provides habitat for greater sage grouse, a BLM sensitive species. Large portions of the Hiawatha landscape are being fragmented due to extensive natural gas development. Sustained development and the proliferation of roads, well pads, pipelines, compressor stations and other surface facilities would continue to reduce habitat patch size and affect both habitat quality and quantity. Although the contribution of the proposed action is in itself small, it may further trend the area away from meeting Standard 4 for greater sage grouse.

Name of specialist and date: Desa Ausmus 07/27/09

PLANT AND ANIMAL COMMUNITY (animal) STANDARD: The project area provides habitat for a variety of wildlife species. The proposed action would disturb 8.3 acres of terrestrial wildlife habitat and would have minimal impacts to terrestrial wildlife. The proposed action would not preclude this standard from being met within the larger landscape.

Name of specialist and date: Desa Ausmus 07/27/09

PLANT AND ANIMAL COMMUNITY (plant) STANDARD: The Proposed Action would completely remove 8.3 acres of native vegetation. As long as the COAs concerning revegetation and weed control are faithfully adhered to, the native plant community would eventually return and non-native species would be kept in-check, and thus meet this standard.

Name of specialist and date: Mark Lowrey 07/21/09

SPECIAL STATUS, THREATENED AND ENDANGERED SPECIES (plant)

STANDARD: There are no federally listed threatened or endangered or BLM sensitive plant species present within or in the vicinity of the proposed well. This standard does not apply.

Name of specialist and date: Hunter Seim 07/21/09

RIPARIAN SYSTEMS STANDARD: There are no riparian areas or wetlands near the proposed well site. This standard does not apply.

Name of specialist and date: Desa Ausmus 8/13/09

WATER QUALITY STANDARD: The proposed action would meet the public land health standard for water quality. Reclamation of the pipeline corridors would be completed immediately after installation to minimize sheet and rill erosion from the corridor. Interim reclamation of the unused area on the well pad would be completed to minimize sheet and rill erosion from the well site. When the well pad is no longer needed for production operations, the disturbed well pad and access road would be reclaimed to approximate original contours, topsoil would be redistributed, and adapted plant species would be reseeded. These Best Management

Practices would help to reduce accelerated erosion of the sites. No stream segments near this project are listed as impaired.

Name of specialist and date: Shawn Wiser 07/20/09

UPLAND SOILS STANDARD: The proposed action would not meet the upland soil standard for land health, and it is not expected to while the well locations, pipelines, and access roads are used for operations. The well pad sites, pipeline corridors, and access roads would not exhibit the characteristics of a healthy soil. Several Best Management Practices have been designed into the project or are attached as mitigating measures that would reduce impacts to and conserve soil materials. Upland soil health would return to the well pads, pipeline corridors, and access roads disturbances after reclamation practices and well abandonments have been successfully achieved.

Name of specialist and date: Shawn Wiser 07/20/09

PERSONS/AGENCIES CONSULTED: Uintah and Ouray Tribal Council, Colorado Native American Commission, Colorado State Historic Preservation Office.

FINDING OF NO SIGNIFICANT IMPACT (FONSI)
DOI-BLM-CO-N010-2009-0078-EA

Based on the analysis of potential environmental impacts contained in the EA and all other available information, I have determined that the proposal and the alternatives analyzed do not constitute a major Federal action that would adversely impact the quality of the human environment. Therefore, an EIS is unnecessary and will not be prepared. This determination is based on the following factors:

1. Beneficial, adverse, direct, indirect, and cumulative environmental impacts have been disclosed in the EA. Analysis indicated no significant impacts on society as a whole, the affected region, the affected interests, or the locality. The physical and biological effects are limited to the Little Snake Resource Area and adjacent land.
2. Public health and safety would not be adversely impacted. There are no known or anticipated concerns with project waste or hazardous materials.
3. There would be no adverse impacts to regional or local air quality, prime or unique farmlands, known paleontological resources on public land within the area, wetlands, floodplain, areas with unique characteristics, ecologically critical areas, or designated Areas of Critical Environmental Concern.
4. There are no highly controversial effects on the environment.
5. There are no effects that are highly uncertain or involve unique or unknown risk. Sufficient information on risk is available based on information in the EA and other past actions of a similar nature.
6. This alternative does not set a precedent for other actions that may be implemented in the future to meet the goals and objectives of adopted Federal, State, or local natural resource related plans, policies, or programs.
7. No cumulative impacts related to other actions that would have a significant adverse impact were identified or are anticipated.
8. Based on previous and ongoing cultural surveys, and through mitigation by avoidance, no adverse impacts to cultural resources were identified or anticipated. There are no known American Indian religious concerns or persons or groups who might be disproportionately and adversely affected as anticipated by the Environmental Justice Policy.

9. No adverse impacts to any threatened or endangered species or their habitat that was determined to be critical under the Endangered Species Act were identified. If, at a future time, there could be the potential for adverse impacts, treatments would be modified or mitigated not to have an adverse effect or new analysis would be conducted.

10. This alternative is in compliance with relevant Federal, State, and local laws, regulations, and requirements for the protection of the environment.

DECISION AND RATIONALE:

I have determined that approving this APD is in conformance with the approved land use plan. It is my decision to implement the project with the mitigation measures provided in the Application for Permit to Drill and the Conditions of Approval. The project will be monitored as stated in the Compliance Plan outlined below.

MITIGATION MEASURES: The mitigation measures for this project are found in the file room of the Little Snake Field Office. The APD 12-point surface use plan, well location maps, and the Conditions of Approval are found in the well case file labeled COC02913 Sparks Ridge Unit Well #9-33.

COMPLIANCE PLAN(S):

Compliance Schedule

Compliance will be conducted during the construction phase and drilling phase to insure that all terms and conditions specified in the lease and the approved APD are followed. In the event a producing well is established, periodic inspections as identified through the Inspection and Enforcement Strategy and independent well observations will be conducted. File inspections will include a review of all required reports and the Monthly Report of Operations will be evaluated for accuracy.

Monitoring Plan

The well location and access road will be monitored during the term of the lease for compliance with pertinent Regulations, Onshore Orders, Notices to Lessees, or subsequent COAs until final abandonment is granted; monitoring will help determine the effectiveness of mitigation and document the need for additional mitigative measures.

Assignment of Responsibility

Responsibility for implementation of the compliance schedule and monitoring plan will be assigned to the Fluid Mineral staff in the Little Snake Field Office. The primary inspector will be the Petroleum Engineering Technician, but the Petroleum Engineer, Natural Resource Specialist, Realty Specialist, and Land Law Examiner will also be involved.

SIGNATURE OF PREPARER:

DATE SIGNED:

SIGNATURE OF ENVIRONMENTAL REVIEWER:

DATE SIGNED:

SIGNATURE OF AUTHORIZED OFFICIAL:

DATE SIGNED: